

ABSTRACT

[0042] A system and method for high-speed radiographic inspection of fluid transport vessels in which a radiation source and a radiation detector are positioned on opposite sides of the outside surface of the vessel. A positioning system is provided for moving and locating the radiation source and radiation detector longitudinally with respect to the vessel and for moving the radiation source and radiation detector circumferentially with respect to the vessel. In operation, the positioning system causes the radiation source and radiation detector to spiral along the vessel in a coordinated manner while the radiation source illuminates an adjacent region of the vessel with radiation. The radiation is converted into corresponding electrical signals used to generate images of objects in the radiation path. Finally, an operator inspects the images for defects.